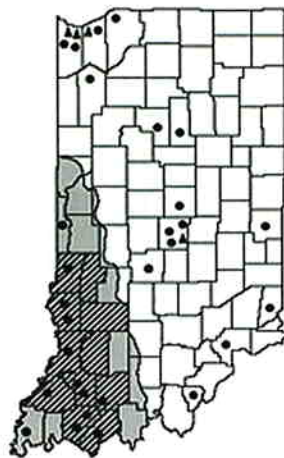


INDIANA, COAL, ELECTRICITY, & ENVIRONMENT

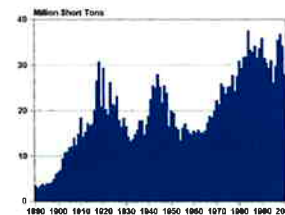
- › Indiana's recoverable reserves are 9.6 Billion Tons. enough to last for over 250 years (assuming current production rate of 35 Million Tons/year)
- › 79% of Indiana's generating capacity (MW) uses coal. Indiana now produces 35 Million Tons/year of bituminous coal.
- › Indiana now consumes 66 Million tons of coal (31 Million Tons imported to state).
- › Adoption of clean coal technologies (CCT) is a potentially key issue for state planners.
- › Integrated Gasification Combined Cycle (IGCC) plants might be the key for the future electricity needs of the state (a projected 50% increase in generation for 2021).
- › Indiana's coal fired power plant emissions are environmentally significant being ranked in the highest 5 states for emissions from coal fired power stations.



Indiana production of 32 Million Tons of coal in 2003

Indiana coal has high heat content and sulfur content

78% of Indiana production is from surface mining



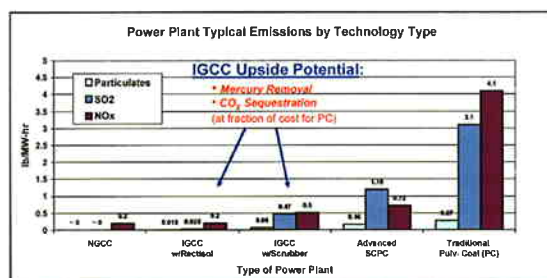
GENERATION TECHNOLOGY OPTIONS & COSTS

	PC Subcritical	PC Supercritical	CFB	IGCC	IGCC
EPIC Cost, \$/kW	1,250	1,300	1,300	440	1,300
Ave. Heat Rate, Btu/kWh	9,300	8,700	9,800	7,200	8,650
Cost of Electricity \$/MWh	53	53	54	52	55

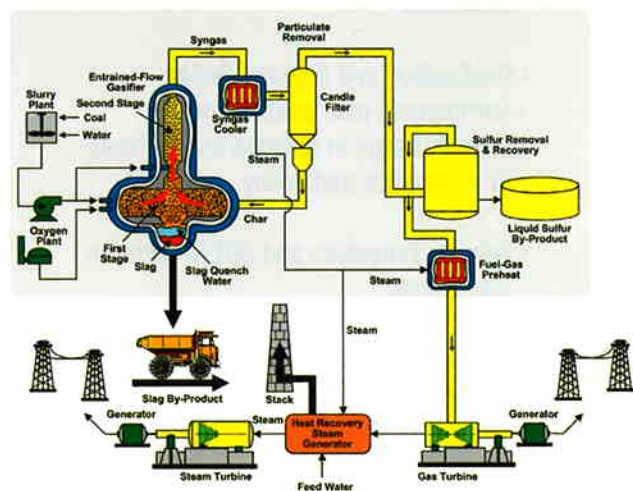
COAL PRODUCTIVITY IN 2004

State	Number of Mines	Employees	Production Million Tons	Tons Per Employee
Indiana	49	2,830	35.1	12,406
Illinois	29	3,573	31.9	8,915
Kentucky	547	15,522	114.2	7,360

The majority of Indiana's coal, 66% in 2003, went to power stations (21 of the 32 Million Tons of in-state coal) and 70% of Indiana's total coal consumption (46 MTons of the 65 MTons) went to power stations.



WABASH RIVER INTEGRATED GASIFICATION CC PLANT



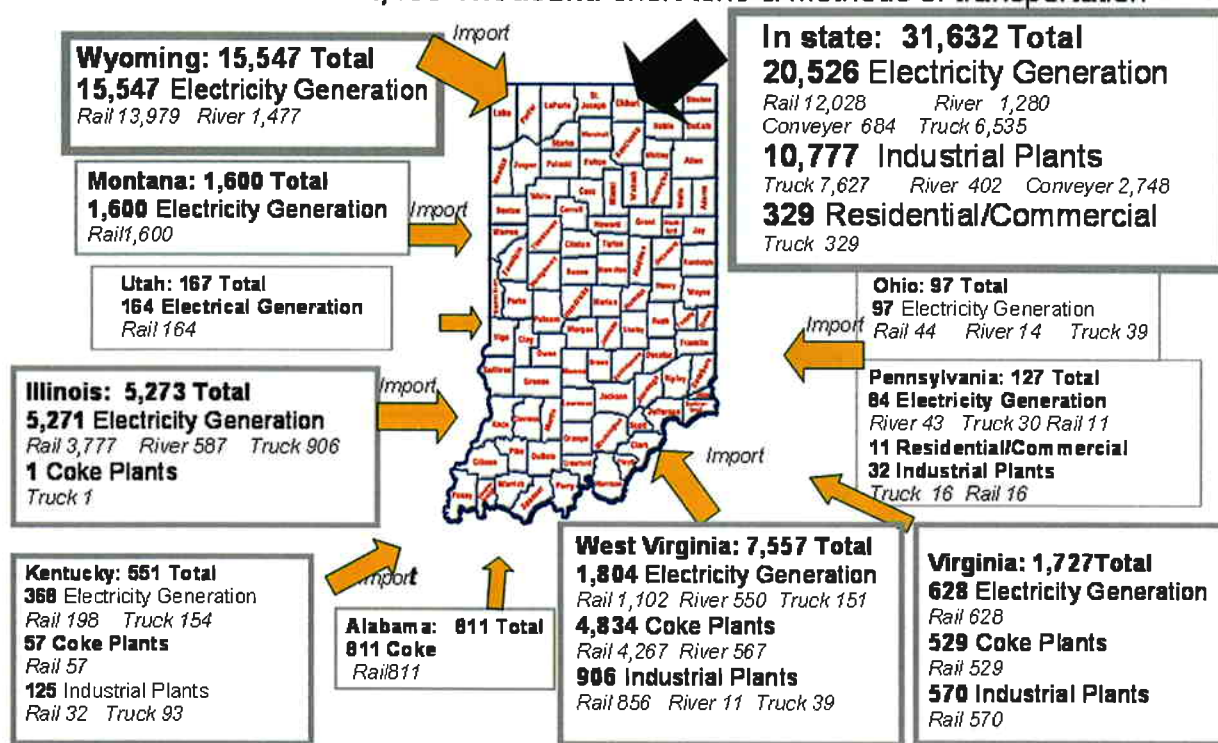
Indiana Coal Research is promoting Illinois Basin coal in the most economically and environmentally sound manner for the benefit of all. Clean coal technologies and the transformation of coal into liquid fuels are two critically important issues for Indiana's future economic growth.

The **ENERGY CENTER** at Discovery Park is integrating coal research activities. Some of the projects include:

- › Economics of Integrated Gasification Combined Cycle (IGCC) with Illinois Basin coal
- › Assessment of the quality of Indiana coal for IGCC performance
- › Development of coking/coal
- › Gasification concept to use Indiana coal for the production of metallurgical coke & bulk electric power
- › The impact of environmental legislation on the competitiveness of Indiana coal for new and existing facilities
- › Coal transportation infrastructure in and around Indiana
- › Reclaiming coal fines from the settling ponds of Indiana

COAL BY DESTINATION STATE IN 2003 - INDIANA

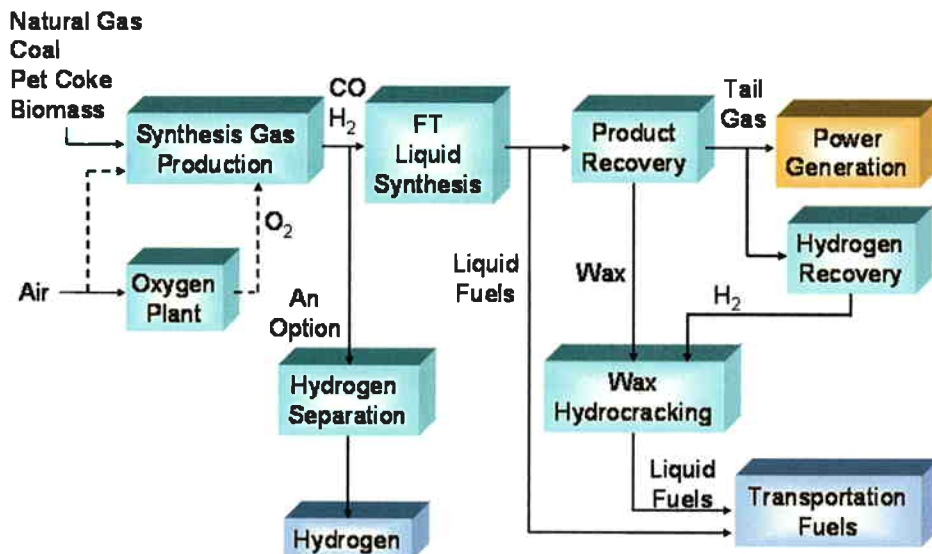
State Total of 64,998 Thousand short tons & methods of transportation



State Totals: 46,000 Electricity Generation
6,213 Coke Plants, 12,411 Industrial Plants, 357 Resid/Com

Source: http://www.eia.doe.gov/cneaf/coal/page/coaldistrib/d_in.html

Fischer-Tropsch Fuel Technology No Sulfur – Low NO_x – Reduced Particulate



Basic and applied coal research topics also include:

- › Transportation fuels from Illinois Basin coal as per the 2005 Energy Policy Act and the Obama-Lugar Amendment, Section 417
- › Factors that affect the design and implementation of clean coal technologies in Indiana
- › Gasification and process design
- › Environment and health issues
- › FT fuels usage in engines and turbines
- › FT economics and policy
- › Role for FutureGen and CCT in Midwest and Indiana
- › Carbon policy and strategic planning for Indiana